

[POLISHING PAD AND PROCESS OF CHEMICAL MECHANICAL USE THEREOF]

Abstract

A chemical mechanical polishing to polish a substrate having a layer to be polished thereon is described. A pre-polishing process is performed using a softer polishing pad to remove partially raised parts of the layer to be polished before conducting a polishing process using a harder polishing pad. Since the first polishing pad is flexible, porous and with low density, the first polishing pad can be deformed to increase contact areas between the first polishing pad and the raised part of the layer to be polished, and the abrasives are embedded easily in holes of the surface of the first polishing pad. Ultimately, the layer to be polished can be polished directly during the pre-polishing process. Therefore, the processing time is reduced, the consumption of the slurry is decreased and the process cost can be cut down substantially.